

**•Afrotropical Asilidae (Diptera) 25. A key to the genera of the subfamily Stenopogoninae with new synonymy and descriptions of six new genera**

by

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ABSTRACT

A key is presented to the 35 genera of Afrotropical Stenopogoninae. Six new genera and twenty eight new species are described. Notes are provided on genera still requiring taxonomic attention.

New genera (type species): *Agrostomyia* (*A. dimorpha* sp. n.), *Corymyia* (*C. melas* sp. n.), *Irwinomyia* (*I. argentea* sp. n.), *Macroetra* (*M. damara* sp. n.), *Microphontes* (*M. whittingtoni* sp. n.), *Pedomomyia* (*P. epidema* sp. n.), *Trichoura* (*T. torynopoda* sp. n.).

New species: *Agrostomyia dimorpha*, *Corymyia antimelas*, *C. euryops*, *C. melas*, *C. xantha*, *Irwinomyia argentea*, *I. aurea*, *Macroetra angola*, *M. cera*, *M. damara*, *Microphontes safra*, *M. megoura*, *M. whittingtoni*, *Pedomomyia astroptica*, *P. dryopolis*, *P. epidema*, *P. melanothrix*, *P. namaqua*, *P. namibia*, *P. simba*, *P. xanthocera*, *P. zela*, *Trichoura krugeri*, *T. mesochora*, *T. proctomeces*, *T. tankwa*, *T. torynopoda*, *T. tyligma*.

New synonymy: *Sporadothrix* Hermann, 1907 = *Acnephalum* Macquart, 1838.

New combination: *Acnephalum gracilis* (Hermann, 1907) for *Sporadothrix gracilis* Hermann, 1907.

INTRODUCTION

This is the eighth, and last, in a series of papers originally intended to provide clarification regarding the many Afrotropical genera of the large subfamily Stenopogoninae. Although a few taxonomic questions remain unanswered and revisions of some of the genera are required, it is now feasible to provide a key to genera. Previous contributions leading directly to the culmination of this project are briefly surveyed in the following paragraph.

Londt (1983) demonstrated that the stenopogonine genera may be conveniently divided into two main groups, those with bare anatergites and those with setose anatergites, and provided a key to the seven genera constituting the latter group (*Anasillomos* Londt, *Daspletis* Loew, *Diocobroma* Hull, *Dogonia* Oldroyd, *Microstylum* Macquart, *Oratostylum* Ricardo and *Remotomyia* Londt). Then followed seven papers intended to resolve taxonomic problems associated with the stenopogonine genera lacking setose anatergites. The first in this series (Londt 1990) was a revision of *Pycnomerinx* Hull; the second (Londt 1992a) included revisions of *Empodiodes* Oldroyd, *Hynirhynchus* Lindner and *Lycostommyia* Oldroyd; the third (Londt 1992b) contained the description of the monotypic genus *Bana* Londt; the fourth (Londt 1992c) was dedicated to a revision of *Scylaticus* Loew and the erection of *Connomyia* Londt to accommodate species previously allocated to *Scylaticus*, but clearly digeneric (ie. not congeneric – see Londt 1993a). The fifth contribution (Londt 1993b) clarified the generic positions of *Psilinus* Wulp, *Spanurus* Loew, and

*Rhabdogaster* Loew (the first two being synonymised with the last), while the sixth (Londt 1993c) included a revision of *Connomyia* and the description of the closely related genus *Danomyia* Londt. The seventh and most recent paper in the series (Londt 1994) was devoted to establishing that no valid species of the largely Holarctic genera, *Cyrtopogon* Loew, *Heteropogon* Loew. and *Holopogon* Loew, inhabit the afrotropics. All species previously assigned to these genera were placed together in a newly established genus *Afroholopogon* Londt. With these studies completed a number of well-established genera still need revision, and a number of newly discovered genera require description. The new genera are here described and a key to all the genera is thus presented; revisionary work will have to await future attention.

The Afrotropical stenopogonine fauna is rich and diverse, especially in southern Africa. These flies are particularly well represented in arid areas. As desert and semi-desert biomes have been poorly sampled, it is likely that many new taxa still await discovery.

#### MATERIALS AND METHODS

Reference should be made to Londt (1992c). Complete label data are provided for holotypes (and topotypic paratypes); other specimens are listed with abbreviated data only. Coordinates are supplied in square brackets when this information, or a quarter-degree grid reference, is not recorded on labels. Although male terminalia may be rotated, illustrations were prepared ignoring rotation (ie. the epandrium is shown as dorsally situated) to facilitate comparisons. All material consulted is in the Natal Museum unless otherwise stated. Abbreviations: HT – holotype, PT – patatype(s). Institutional codens used in this paper are as follows:

BMNH — The Natural History Museum, London, UK  
 BMSA — National Museum, Bloemfontein, South Africa  
 NMSA — Natal Museum, Pietermaritzburg, South Africa  
 SAMC — South African Museum, Cape Town, South Africa  
 ZMUC — Zoologisk Museum, Copenhagen, Denmark

#### KEY TO GENERA OF AFROTROPICAL STENOPOGONINAE

This key includes a modified version of one published earlier (Londt 1983). Bracketed numbers after generic names indicate that similarly numbered taxonomic notes follow the key.

- |   |   |   |
|---|---|---|
| 1 | Anatergites setose .....  | 2 |
| – | Anatergites bare .....  | 8 |
| 2 | Antennal segment 3 (first flagellomere) with distinct well-developed style (microsegment) ..... | 3 |
| – | Antennal segment 3 tipped with a small pit enclosing a tiny seta, no style present .....        | 7 |
| 3 | Occiput without macrosetae (weak setae only) .....  | 4 |
| – | Occiput with macrosetae (weak setae also) .....   | 5 |

- 4 Eye:face width ratio  $< 1.1:1$ ; scape clearly longer than pedicel; ♂ hypandrium  $<$  half as long as epandrial lobes (1 species – Londt 1983) ..... **Diocetobroma** Hull  
 – Eye:face width ratio  $> 1.3:1$ ; scape and pedicel about equal in length; ♂ hypandrium about as long as epandrial lobes (2 species – Londt 1983) .....  
**Dogonia** Oldroyd
- 5 Propleuron with a few well-developed macrosetae as well as fine setae; ♂ hypandrium very short (about one-quarter length of epandrial lobes) (1 species – Londt 1983) ..... **Anasillomos** Londt  
 – Propleuron with fine setae only; ♂ hypandrium at least half length of epandrial lobes ..... 6
- 6 Facial swelling well-defined in dorsal part; eye:face width ratio  $> 1.2:1$  (2 species – Londt 1983 1985a) ..... **Oratostylum** Ricardo  
 – Facial swelling not well-defined in dorsal part; eye:face width ratio  $< 1.2:1$  (3 species – Londt 1983) ..... **Remotomyia** Londt
- 7 Facial swelling occupying about three-quarters of face and entirely covered with macrosetae and setae; presutural dorsocentral setae well developed; vein  $M_1$  not strongly arched anteriorly; postmetacoxal membrane covered with long setae (7 species – Londt 1983 1985a) ..... **Daspletis** Loew  
 – Facial swelling occupying at most half of face and often with macrosetae only on lower half; dorsocentrals present only on posterior half of mesonotum; vein  $M_1$  usually strongly arched anteriorly; postmetacoxal membrane often asetose (79 species – requires revision) ..... **Microstylum** Loew (1)
- 8 Anal lobe and alula lacking bordering vein (ie. costa terminates at or before point where anal vein joins wing margin) ..... 9  
 – Costa extends around entire wing margin (ie. borders anal lobe and alula) (weakly in *Trichoura*) ..... 13
- 9 Pulvilli minute or absent ..... 10  
 – Pulvilli well developed ..... 12
- 10 Costa extends as far as anal vein ..... 11  
 – Costa terminates just beyond juncture with  $R_{2+3}$ , leaving almost entire hind margin of wing without bordering vein (15 species – new material suggests that a revision is required) ..... **Sisyrnodytes** Loew
- 11 Pulvilli present, but highly reduced; empodium present. Base of  $R_4$  usually with short, proximally directed, branch. Palpi 2-segmented, well developed. Dorsocentral macrosetae not well differentiated. Small to moderately sized bee-like flies (8 species – requires revision) ..... **Acnephalum** Macquart (2)  
 – Pulvilli absent; empodium absent. Base of  $R_4$  without short, proximally directed, branch. Palpi appear 1-segmented, highly reduced. Dorsocentral macrosetae well differentiated. Tiny, not particularly bee-like flies (1 species – Londt 1985c) .....  
**Ammodaimon** Londt
- 12 Postmetacoxal bridge present (8 species – Londt 1993b) ... **Rhabdogaster** Loew  
 – Postmetacoxal bridge absent (12 species – Londt 1994; requires revision) .....  
**Afroholopogon** Londt (3)



- 24 ♂ terminalia of club-like appearance; epandrium greatly developed, hemispherical; hypandrium greatly reduced (4 species – this paper).....  
**Corymyia** gen. n.
- ♂ terminalia of more usual form; epandrium not greatly developed; hypandrium not greatly reduced ..... 25
- 25 ♂ gonocoxite with 2, subequal, pointed, distal processes, the outer one with at most a small tumid dorsodistal projection; mystax well developed, extending to antennal sockets; scutellum with many marginal setae, these usually extending weakly onto the disc (central area usually asetose) (20 species – Londt 1993c) ....  
**Connomyia** Londt
- ♂ gonocoxite with outer process having a distal or dorsodistal flange-like process; mystax moderately well developed, extending to antennal bases, but usually weak in upper part; scutellum usually with few marginal setae which rarely extend onto disc (9 species – Londt 1993c) ..... **Danomyia** Londt
- 26 Anepimeral bristle present; metathoracic empodia laterally compressed and blade-like (3 species – Londt 1992a) ..... **Empodiodes** Oldroyd
- Anepimeral bristle absent; metathoracic empodia setose, not laterally compressed and blade-like ..... 27
- 27 Lower  $\frac{1}{4}$  of face clearly gibbose, upper part of swollen area clearly defined ..... 28
- Face at most gently gibbose (upper part of swollen area not clearly defined) .. 29
- 28 Body entirely metallic blue-black; third antennal segment elongate, cylindrical, *ca.* twice as long as first two segments combined; wing uniformly blackish (1 species) ..... **Teratopomyia** Oldroyd (5)
- Body not uniformly metallic blue-black; third antennal segment strongly club-shaped, *ca.* as long as first two segments combined; wing transparent with dark markings (21 species – Londt 1985b) ..... **Hypenetes** Loew
- 29 Mystax occupies at most the lower  $\frac{1}{3}$  of face ..... 30
- Mystax occupies at least the lower  $\frac{1}{2}$  of face ..... 33
- 30 Wing cells  $m_3$  and cup closed and stalked; ♂ hypandrium highly reduced and largely fused with gonocoxites (6 species – this paper) ..... **Trichoura** gen. n.
- Wing cells  $m_3$  and cup open at wing margin; ♂ hypandrium moderately well developed and not fused with gonocoxites ..... 31
- 31 Epandrial lobes entirely separated, except at base (3 species – this paper) .....  
**Microphontes** gen. n.
- Epandrial lobes fused for at least basal half of length ..... 32
- 32 Scutellar disc lacking setae; epandrial lobes fused for *ca.* half of length (3 species – this paper) ..... **Macroetra** gen. n.
- Scutellar disc with few (*ca.* 4) setae; epandrium with slight posterior indentation (lobes hardly evident, being fused for entire length of epandrium) (2 species – this paper) ..... **Irwinomyia** gen. n.
- 33 Third antennal segment widening toward the middle (in lateral view), apical half appearing strongly incised ventrally (Fig. 55); mystax occupying *ca.*  $\frac{1}{3}$  face (9 species – this paper) ..... **Pedomyia** gen. n.

- Third antennal segment not widening toward the middle and without strongly incised apical half; mystax occupies *ca.*  $\frac{1}{2}$  face ..... 34
- 34 ♂ epandrial lobes long, entirely separated or very narrowly joined proximally; hypandrium more or less straight and distally directed (35 species – Londt 1992c) ..... **Scylaticus** Loew
- ♂ epandrial lobes short, fused proximally for *ca.*  $\frac{1}{2}$  their length; hypandrium elongate, ventrally directed with upturned distal region (1 species – this paper) ...  
**Agrostomyia** gen. n.

#### Taxonomic notes

1. *Microstylum* Macquart, 1838: *Eclipsis* Bezzi, 1908 and *Epiblepharis* Bezzi, 1908, described as full genera, were considered as subgenera of *Microstylum* by Hull (1962) and Papavero (1973). However, Oldroyd (1980) treated them as separate genera (both monotypic). During preliminary research on the genus, I studied the types of both taxa and believe them to be congeneric with *Microstylum*. Until a complete review of this genus has been undertaken, I prefer to consider Bezzi's two genera to be subgenera as suggested by Hull (1962). For this reason they are not keyed separately in this paper.
2. *Acnephalum* Macquart, 1838: As pointed out by Oldroyd (1974), the genotype is *A. olivieri* Macquart, the only truly Palaearctic species known. The only other species listed in the Palaearctic catalogue (*A. futile* Wulp) is from Aden (South Yemen), an area usually included in the Afrotropical Region. I have not seen specimens of *A. olivieri*, so it may not be congeneric with the Afrotropical species.  
*Sporadothrix* Hermann, 1907: Because of uncertainty about the placement of this monotypic genus (Hull 1962 treated it under Laphriinae, Oldroyd (1974) under Stichopogonini), I borrowed the holotype ♂ of the only species, *S. gracilis* Hermann. Hull (1962), who had not seen Hermann's material, said that no details of the wing could be obtained (Hermann failed to mention them); this probably led Oldroyd (1974) to state that the type was a 'completely wingless specimen'. This is not true. While the wings are somewhat twisted and lack much of their posterior parts, both are at least partly present and show, along with other diagnostic features, that the genus is correctly placed in Stenopogoninae. The alulae are complete, demonstrating the absence of a bordering costal vein. This places the genus near *Sisyrnodytes*, *Acnephalum*, *Ammodaimon*, *Rhabdogaster* and *Afroholopogon*. In addition, the left wing is complete enough to show that  $R_4$  has the short, proximally directed vein characteristic of *Acnephalum*. The *S. gracilis* holotype is clearly similar to *A. cylindricum* Oldroyd (which is represented in NMSA by the holotype ♀, and more recently acquired material of both sexes). On these grounds I have decided to synonymise *Sporadothrix* with *Acnephalum* (**syn. n.**). As *gracilis* is dispecific with *cylindricum*, and is probably a valid species, *Acnephalum gracilis* (Hermann, 1907) is a **new combination**. *A. cylindricum*, and *A. gracilis* are exceptional species in that the abdomen is not wide and dorsoventrally

compressed, and the genitalia are not partly retracted, as in all other Afrotropical *Acnephalum*. The possibility exists that future revisionary studies may show these species to be digeneric. If this happens the name *Sporadothrix* may need resurrecting. To add to the complexity of the situation, Oldroyd (1974) reported on a specimen from Namibia, which he identified as *Sporadothrix gracilis*, offering a brief description and illustration of the entire insect. The specimen is certainly not an *Acnephalum*, but may well prove to be congeneric with *Ammodaimon*, although dispecific with *A. acares* Londt, 1985, the only species as yet assigned to this genus.

3. *Afroholopogon* Londt, 1994: Recent work revealed that Afrotropical taxa previously placed in *Cyrtopogon* Loew, *Heteropogon* Loew and *Holopogon* Loew do not belong to these valid Holarctic genera (Londt 1994). Revisionary work is required on the species now combined in *Afroholopogon*, as this may be a composite genus.
4. *Gonioscelis* Schiner, 1866: Oldroyd (1980) lists 28 species; *G. francoisi* Oldroyd, 1970, was, however, inadvertently excluded. *Dasypogon scapularis* Macquart, 1838, has also been transferred to *Gonioscelis* since the Afrotropical catalogue was published (Londt 1985d: 48), thus bringing the number of described species to 30. A revision of the genus is required (new material in the Natal Museum suggests there are a number of undescribed species from the Cape Province of South Africa).
5. *Rhacolaemus* Hermann, 1907 and the monotypic *Teratopomyia* Oldroyd, 1980: The taxonomic positions of these genera require clarification as they are very similar to *Stenopogon* Loew, 1847, a widespread and variable genus.

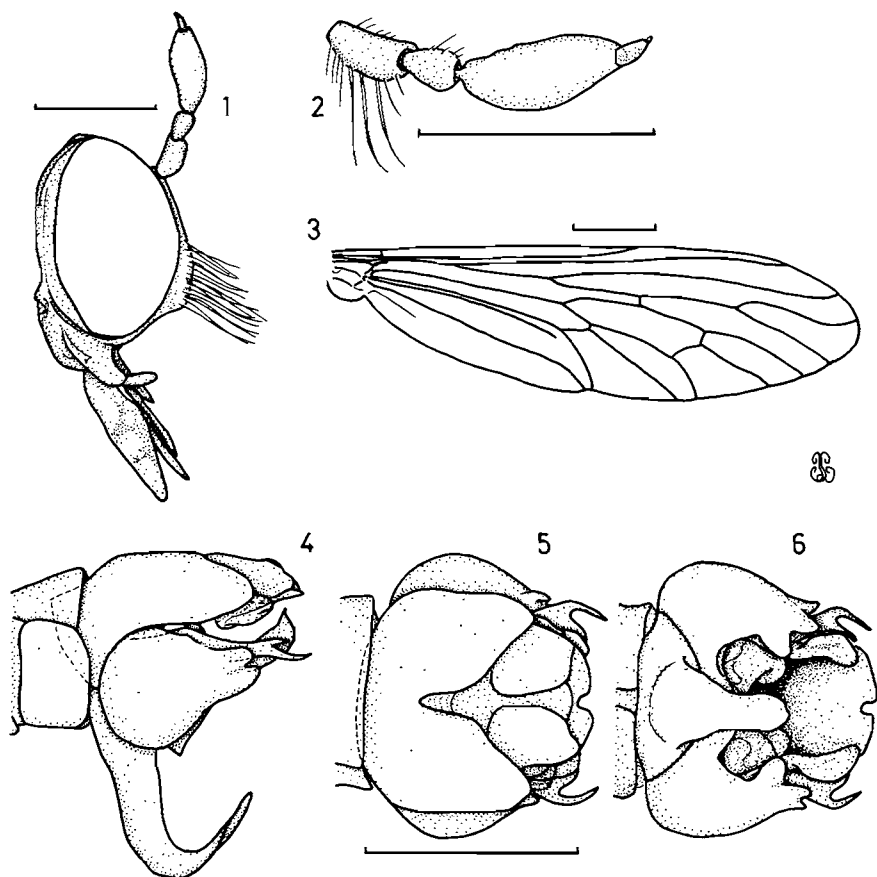
#### TAXONOMY

##### *Agrostomyia* gen n.

Type species: *Agrostomyia dimorpha* sp. n.

Description: Medium-sized, *Scylaticus*-like asilids with dark head and thorax, largely orange legs and sexually dimorphic abdominal coloration, and the following combination of characters: *Head* (Fig. 1): clearly wider than high in anterior view. Antenna (Fig. 2): scape *ca.* twice as long as pedicel, segment 3 *ca.* 1.5 times as long as scape and pedicel combined, style small, conical with terminal spine-like seta. Mystax occupies lower, slightly protuberant  $\frac{1}{2}$  of otherwise plane face; palpi well developed, 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle absent; *ca.* 5 pairs scutellar macrosetae and smaller setae extending onto disc. Wing (Fig. 3): *ca.* 6–10 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup open at wing margin. Legs: pulvilli and empodia well developed. *Abdomen*: ♀ terminalia rotated through 90°; ♂ epandrium short, fused proximally for *ca.*  $\frac{1}{2}$  length; hypandrium elongate, ventrally directed with upturned distal part.

Etymology: Gr. f. *agrostis* – grass + *myia* – fly (refers to grass inhabiting behaviour of species). A single species known.



Figs 1–6. *Agrostomyia dimorpha* gen. & sp. n., ♂. 1. Head. 2. Antenna. 3. Wing. 4–6. Genitalia. 4. Lateral. 5. Dorsal. 6. Ventral. 1–2 4–6 – paratype (30 km E Groblershoop), 3 – holotype. Scale lines = 1 mm.

### ***Agrostomyia dimorpha* sp. n.**

Figs 1–6

Supplementary descriptive data: *Head*: black, gold-silver pruinose; antenna black, scape with long, yellow setae ventrally, pedicel with few pale yellow setae dorsally only; mystax and other cephalic setae yellow (paler in ♀); palp blackish with terminal pit-like opening; proboscis black, straight, *ca.* same length as antenna. *Thorax*: blackish, gold-silver pruinose; mesonotal macrosetae yellow (*ca.* 5 npl, 3 spal, 2 pal); ktg setae yellow; scutellum with yellow marginal macrosetae and minor setae which extend onto disc. *Legs*: femora orange; tibiae with proximal  $\frac{1}{2}$  orange,

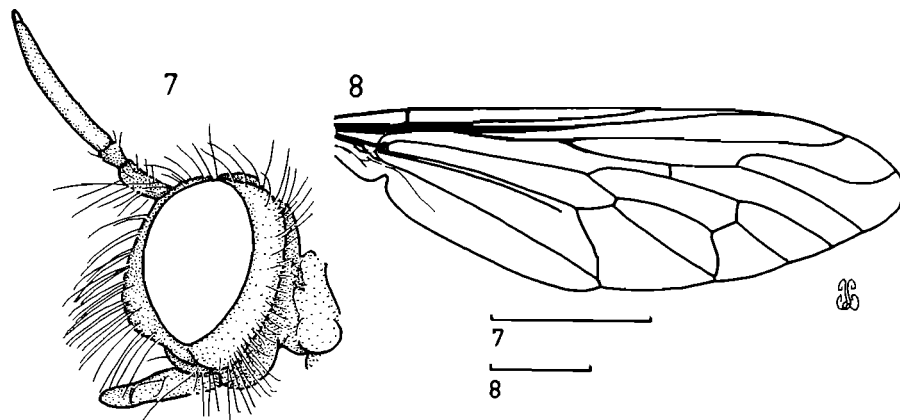


distal  $\frac{1}{2}$  and entire tarsus dark red-brown to black. *Abdomen*: ♂ – T1 S1 and posterior  $\frac{1}{3}$  of T2 blackish, other segments and terminalia orange; setae short, yellow. Genitalia as in Figs 4–6. ♀ – black, hind margins of T2–5 with slight traces of orange. *Variation*: some Namibian ♀♀ have upper parts of femora somewhat dark red-brown (especially hindlegs) while ♂ may have a somewhat duller orange-brown abdominal coloration.

*Material* (NMSA – Type 1096): SOUTH AFRICA: *Cape Province*: 5 ♂ (HT & PT) 5 ♀ (PT): 'Sth Africa Cape Prov / 30 km E. Groblershoop / 2822CD 19.iii.1982 / J. Londt & L. Schoeman / Roadside vegetation' (BMNH – 1 ♂ 1 ♀ PT); 1 ♂ (PT), 35 km W of Kimberley, 2824CB, 17.iii.1982, Londt & Schoeman; 1 ♀ (PT), 14 km S of Hotazel, 27°19'S:22°54'E, 14.7.iii.1991, Londt & Whittington; 1 ♀ (PT), 20 km N of Hotazel, 27°07'S:22°59'E, 14.iii.1991, Whittington & Londt; 1 ♀ (PT), 26 km E of Upington, 28°23'S:21°29'E, 16.iii.1991, Whittington & Londt; 2 ♂ 2 ♀ (PT), 18 km NNW of Marydale, 29°15'S:22°04'E, 18.iii.1991, Whittington & Londt. NAMIBIA: 2 ♂ 2 ♀ (PT), 28 km W Outjo, 20°12'S:15°53'E, 24.iii.1984, Londt & Stuckenberg; 4 ♂ 2 ♀ (PT), Gross Barmen Resort, 22°07'S:16°42'E, 29.iii.1984, Londt & Stuckenberg; 2 ♂ 1 ♀ (PT); 26 km N Windhoek, 22°20'S:17°04'E, 29.iii.1984, Londt & Stuckenberg; 4 ♂ 3 ♀ (PT), Okahandja, 21°59'S:16°37'E, 28.iii.1984, Londt & Stuckenberg; 2 ♂ 2 ♀ (PT), 28 km E Khorixas, 20°16'S:15°12'E, 24.iii.1984, Londt & Stuckenberg; 1 ♀ (PT), 54 km S Khorixas, 20°43'S:14°49'E, 26.iii.1984, Londt & Stuckenberg; 1 ♂ (PT), 13 km S of Windhoek, 2217CA, 18.iv.1983, Stuckenberg & Londt; 6 ♂ 2 ♀ (PT), Otavi [19°39'S:17°20'E], 18.iii.1988, Manning; 1 ♂ (PT), Windhoek [22°35'S:17°05'E] Distr., Farm Portsmut 33, 14–24.iv.1972, Strydom & Jones; 2 ♂ (PT), Hardap dam [2417BD], Mariental Distr., 10–14.iv.1972, Strydom & Jones; 1 ♂ 1 ♀ (PT), Otjimbingbe [?], Kunene R., iii.1923, Mus. Exped. (SAMC); 7 ♂ 1 ♀ (PT), Kaross [River – 19°30'S:14°20'E], ii.1925, Mus. Exped. (SAMC); 1 ♂ (PT), Erikson's Drift [?], Kunene R., iii.1923, Mus. Exped. (SAMC). *Etymology*: Gr. *di* – two + *morphe* – form (refers to the sexual dimorphism displayed by this species).

### *Corymyia* gen. n.

Type species: *Corymyia melas* sp. n.



Figs 7–8. *Corymyia* gen. n., ♂. 7. *C. antimelas* sp. n. Head – holotype. 8. *C. melas* sp. n. Wing – paratype (Hondeklipbaai). Scale lines = 1 mm.

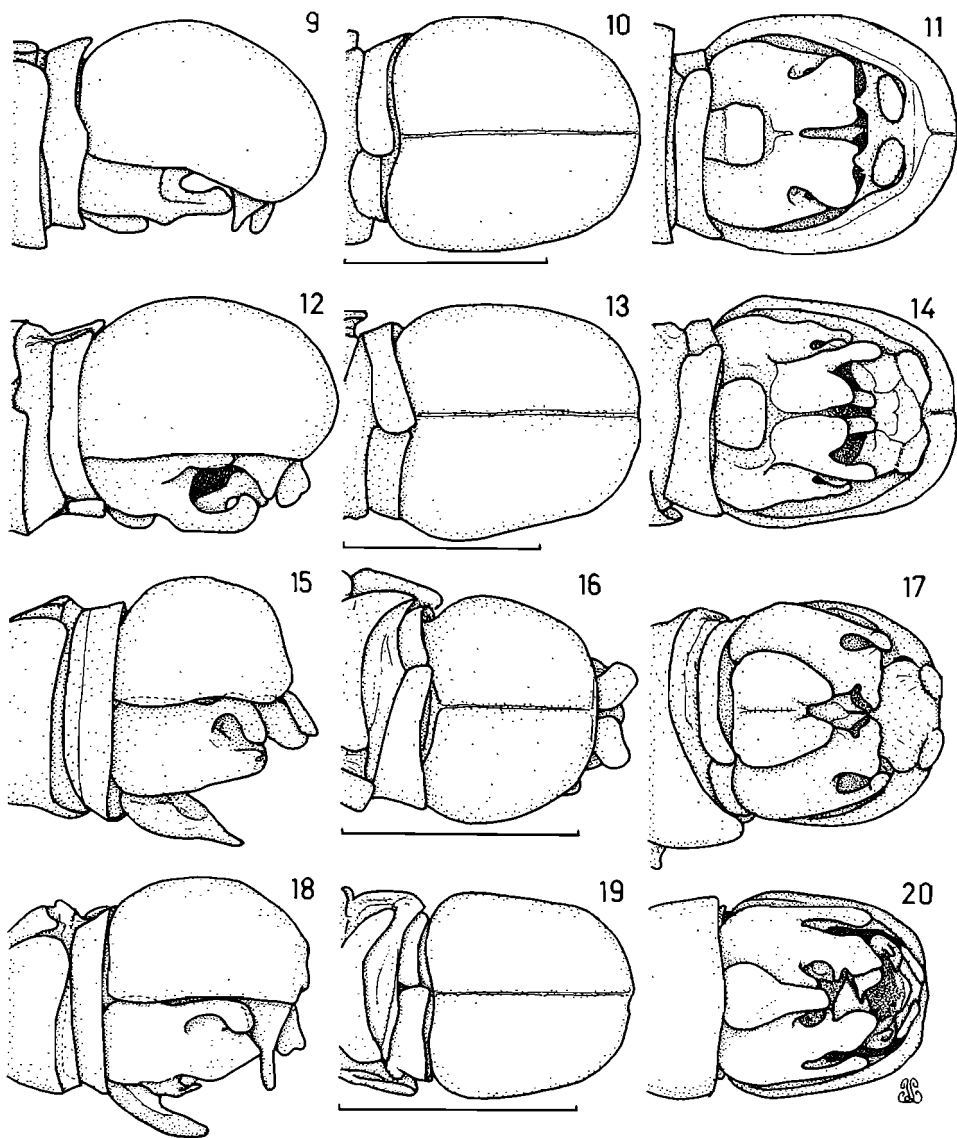
*Description*: Small, mostly blackish (except *xantha*), silver pruinose stenopogonine asilids with the following combination of characters: *Head* (Fig. 7): clearly wider

than high in anterior view. Antenna: scape *ca.* twice as long as pedicel, segment 3 *ca.* twice as long as scape and pedicel combined, style cylindrical with terminal spine-like seta. Mystax composed of strong black and/or white setae which cover entire slightly protruding face (except *xantha* – white setae on lower  $\frac{1}{2}$  of face); palpi 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle well developed; *ca.* 3–4 pairs scutellar macrosetae. Wing (Fig. 8): *ca.* 3–4 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup closed and stalked. Legs: pulvilli and empodia well developed. *Abdomen*: ♂ terminalia rotated through 180°; ♂ epandrium hemispherical, curved inward posteriorly such that proctiger is similarly directed; hypandrium small; gonocoxite complex in structure.

**Etymology:** Gr. f. *koryne* – club, mace + *myia* – fly: refers to club-shaped male terminalia.

#### Key to species of *Corymyia* gen. n.

- 1 Mystax entirely white; legs yellowish (except for blackish tarsomere 5); mesonotal macrosetae mostly white; ♂ hypandrium longer than wide; ♂ genitalia as in Figs 18–20 ..... ***xantha* sp. n.**  
 Material (NMSA – Type 1097): SOUTH AFRICA: *Cape Province*: 1 ♂ (HT): ‘S Africa: Cape #35 / 23 km N of Middelpos / 31°44’S:20°14’E 1170 m / Date: 29.xi.1990 / Whittington & Londt / At Kookfontein River’; 3 ♂ (PT), Kamieskroon [30°12’S:17°56’E], Namaqualand, xi.1936, Museum staff (SAMC).  
 Etymology: Gr. *xanthos* – yellow (refers to generally yellowish appearance).
- Mystax black and white (may be entirely black in ♀); legs black and yellowish (femora black dorsally, yellowish ventrally); mesonotal macrosetae mostly black; ♂ hypandrium wider than long ..... 2
- 2 Face narrower than one eye in anterior view; hypandrium approximately square-shaped, hind margin straight ..... 3
- Face wider than one eye in anterior view; hypandrium not square-shaped, hind margin indented medially to give bilobed appearance; ♂ genitalia as in Figs 15–17 ..... ***euryops* sp. n.**  
 Material (NMSA – Type 1098): SOUTH AFRICA: *Cape Province*: 1 ♂ (HT): ‘Sth Africa: Cape Prov / Biedou Valley 300 m / 32°06’00’’S:19°19’00’’E / J Londt B Stuckenberg / & P Croeser 6.ix.1989 / Rocky gentle N slope / Scrub & wild flowers’.  
 Etymology: Gr. *eury*s – broad, wide + *opos* – face (refers to the wide face of this species).
- 3 ♂ genitalia as in Figs 12–14 (note especially shape of gonocoxite in ventral aspect) ..... ***melas* sp. n.**  
 Material (NMSA – Type 1099): SOUTH AFRICA: *Cape Province*: 4 ♂ (HT & PT): ‘Sth Africa: Cape Prov / 12 km W Soutfontein. / 3017DA 4.ix.1981 / J. Londt, L. Schoeman / and B. Stuckenberg. / Succulent Karoo’ (BMNH – 1 ♂ PT); 1 ♂ (PT): Hondeklipbaai, 3017Ad, 8.ix.1972, Irwin; 4 ♂ 5 ♀ (PT), Wallekraal [30°24’S:17°31’E], Namaqualand, x.1950, Mus. Expd. (SAMC).  
 Etymology: Gr. *melas* – black (refers to the dark colour of this species).
- ♂ genitalia as in Figs 9–11 (note especially shape of gonocoxite in ventral aspect) ..... ***antimelas* sp. n.**  
 Material (NMSA – Type 1100): SOUTH AFRICA: *Cape Province*: 2 ♂ 4 ♀ (HT ♂ & PT): ‘South Africa, Cape Prov / 7 mi. N. Vanrhynsdorp / Sept. 10, 1972. M. E. Irwin / 400 ft, 3118Bc, red dunes’; 1 ♀ 1 ? (PT), Van Rhyn’s pass [E Vanrhynsdorp], 4–5.xi.1933, Van Son; 1 ♀ (PT), Botterkloof Pass, 3119Dc, 13.ix.1972, Irwin; 1 ♀ (PT), Kommetjie, 34°08’S:18°19’E, 13.xii.1988, Londt.  
 Etymology: Gr. *anti* – like + *melas* (refers to a close resemblance to *melas*).

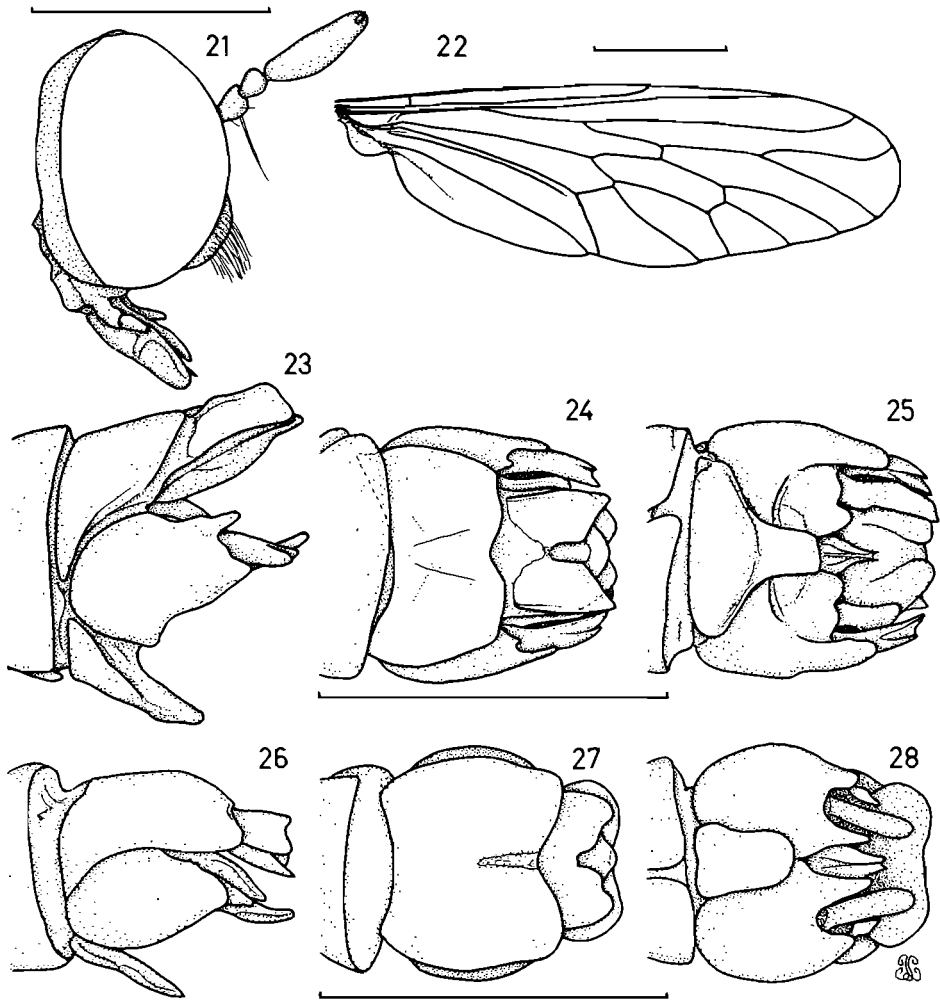


Figs 9–20. *Corymyia* gen. n., ♂ genitalia. 9–11. *C. antimelas* sp. n. paratype (7 mi. N Vanrhynsdorp). 9. Lateral. 10. Dorsal. 11. Ventral. 12–14. *C. melas* sp. n. holotype. 12. Lateral. 13. Dorsal. 14. Ventral. 15–17. *C. euryops* sp. n. paratype (12 km W Soutfontein). 15. Lateral. 16. Dorsal. 17. Ventral. 18–20. *C. xantha* sp. n. holotype. 18. Lateral. 19. Dorsal. 20. Ventral. Scale lines = 1 mm.

**Irwinomyia** gen. n.

Type species: *Irwinomyia argentea* sp. n.

Description: Small, dark brown, gold-silver pruinose stenopogonine asilids with the following combination of characters: *Head* (Fig. 21): clearly wider than high in anterior view. Antenna: scape a little longer than pedicel, segment 3 *ca.* twice as long



Figs 21–28. *Irwinomyia* gen. n., ♂. 21–25. *I. argentea* sp. n. paratype (50 km NW Omaruru). 21. Head. 22. Wing. 23–25. Genitalia. 23. Lateral. 24. Dorsal. 25. Ventral. 26–28. *I. aurea* sp. n. paratype (Maltahöhe Dist.), ♂ genitalia. 26. Lateral. 27. Dorsal. 28. Ventral. Scale lines = 1 mm.

as scape and pedicel combined, style small with terminal spine-like seta. Mystax shiny, confined to lower  $\frac{1}{3}$  of plane face (ventral part slightly protuberant); palpi 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle absent; *ca.*

3–4 pairs scutellar macrosetae. Wing (Fig. 22): *ca.* 3–4 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup open at wing margin. Legs: pulvilli and empodia well developed. *Abdomen*: ♂ terminalia rotated through 90°; ♂ epandrium short, with little indication of separation into two lobes; hypandrium moderate in size with mediobasal lobe.

*Etymology*: f. – named for Dr Michael Irwin, collector of all known material of this genus.

Key to species of *Irwinomyia* gen. n.

- 1 Antennal style situated subterminally; ♂ and ♀ mystax shiny white; ♂ legs mostly brownish; ♂ genitalia as in Figs 23–25 ..... **argentea** sp. n.

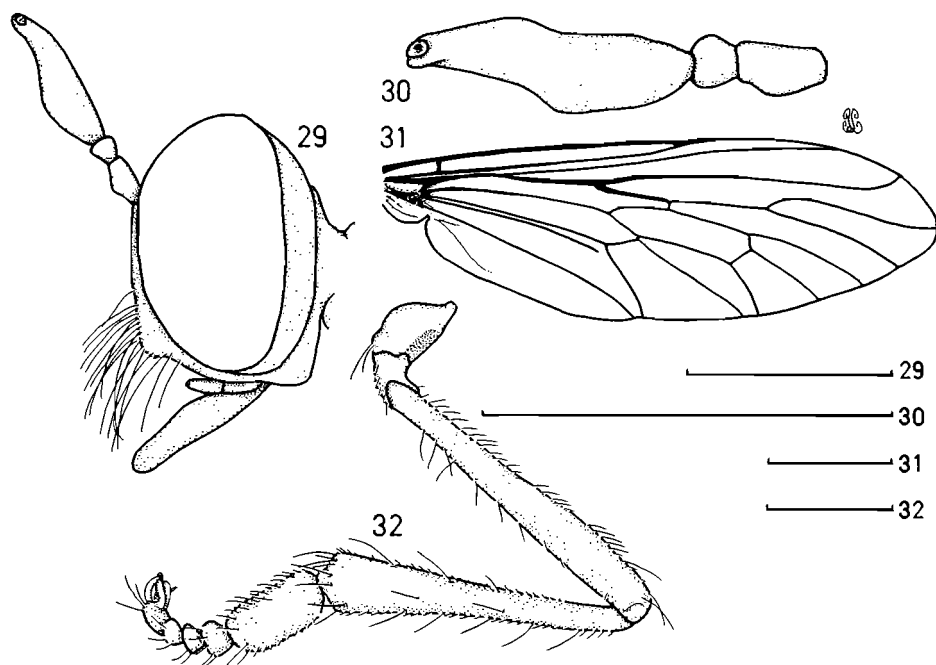
Material (NMSA – Type 1101): NAMIBIA: 14 ♂ (HT & PT) 4 ♀ (PT): 'South West Africa 2115Ba / Omaruru Dist. 50 km, N. W. / Omaruru, 1200 m. 5–II–1974 / ME Irwin, flood plain / with large *Acacia* trees' (BMNH – 1 ♂ PT).

*Etymology*: *L. argenteus* – silvery (refers to shiny white mystax).

- Antennal style situated terminally; ♂ mystax shiny orange, ♀ mystax shiny white; ♂ legs mostly yellowish; ♂ genitalia as in Figs 26–28 ..... **aurea** sp. n.

Material (NMSA – Type 1102): NAMIBIA: 6 ♂ (HT & PT) 3 ♀ (PT): 'South West Africa 2516Ac / Maltahöhe Dist. Aandster / Farm, 1000 m. 16–II–1974 / ME Irwin, vegetated dune / and grassland'.

*Etymology*: *L. aureus* – golden (refers to shiny orange mystax of ♂).



Figs 29–32. *Macrosetra* gen. n., ♂. 29–31. *M. damara* sp. n. Head and wing – paratype (54 km S Khorixas). 29. Head. 30. Antenna. 31. Wing. 32. *M. angola* sp. n. paratype ♂ (Capangombo) Leg. Scale lines = 1 mm.

**Macroetra gen. n.**

Type species: *Macroetra damara* sp. n.

Description: Small to medium sized, brown and/or yellowish, gold-silver pruinose stenopogonine asilids with the following combination of characters: *Head* (Fig. 29): clearly wider than high in anterior view. *Antenna* (Fig. 30): scape *ca.* twice as long as pedicel, segment 3 *ca.* twice as long as scape and pedicel combined, style small with spine-like seta. *Mystax* shiny pale yellow or white, confined to lower  $\frac{1}{3}$  of plane face (ventral part slightly protuberant); palpi 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle absent; *ca.* 3–4 pairs scutellar macrosetae. *Wing* (Fig. 31): *ca.* 4–7 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup open at wing margin. *Legs*: pulvilli and empodia well developed. *Abdomen*: elongate; ♂ terminalia rotated through 90°; ♂ epandrium of moderate length, fused basally before separating into two lobes at about midlength; hypandrium small to moderate in size with broad mediodistal lobe.

Etymology: Gr. n. *makros* – long + *etron* – abdomen (refers to elongate abdomen).

**Key to species of *Macroetra* gen. n.**

- 1 Antennal style minute, situated subterminally (ie. segment 3 projecting beyond style and associated seta); tarsomere 1 not greatly enlarged and equal in length to all other tarsomeres combined ..... 2
- Antennal style situated terminally; tarsomere 1 greatly swollen and large, *ca.* equal in length to all other tarsomeres combined (Fig. 32); ♂ genitalia as in Figs 33–36 ..... **angola** sp. n.

Material (NMSA – Type 1103): ANGOLA: 7 ♂ (HT & PT) 1 ♀ (PT): ‘Angola: 5 km e. / Capangombe 15°05'S / 17–20.x.1974 13°10'E / Malaise trap’.

Etymology: from Angola.

- 2 First two antennal segments yellowish; dorsocentral macrosetae extending well anterior of transverse suture; abdomen blackish; ♂ genitalia as in Figs 40–42 ..... **damara** sp. n.

Material (NMSA – Type 1104): NAMIBIA: 8 ♂ (HT & PT) 1 ♀ (PT): ‘Namibia 26.iii.1984 / 54 km S Khorixas. Road / 76. 20 43'S:14 49'E / Londt & Stuckenberg / Roadside grass and / flowers, sandy area.’ (BMNH – 1 ♂ PT); 1 ♂ (PT), 15 km W Usakos, 21°58'S:15°30'E, 28.iii.1984, Londt & Stuckenberg; 1 ♂ (PT), 87 km SE Otjiworongo, 21°03'S:17°10'E, 19.iii.1984, Stuckenberg & Londt; 2 ♂ 3 ♀ (PT), Kamanyab [19°38'S:14°50'E], ii.1925, Mus. Exped. (SAMC); 1 ♂ 1 ♀ (PT), Kaross, ii.1925, Mus. Exped. (SAMC); 1 ♀ (PT), Otjituo [19°40'S:18°36'E], i.1920, Tucker (BMNH).

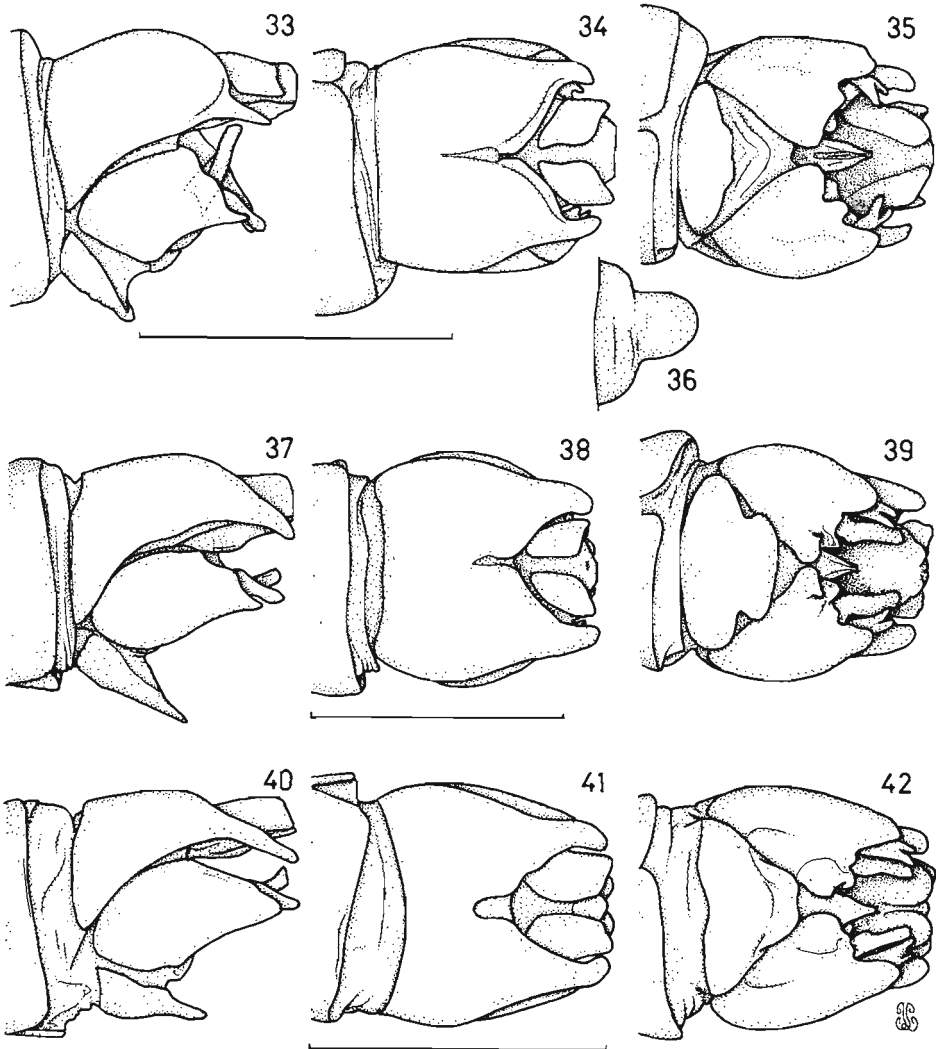
Etymology: from Damaraland.

- First two antennal segments red-brown to black; dorsocentral macrosetae not extending well anterior of transverse suture (perhaps one pair only); abdomen variable, but frequently with orange dorsal parts; ♂ genitalia as in Figs 37–39 ..... **cera** sp. n.

Material (NMSA – Type 1105): NAMIBIA: 2 ♂ (HT & PT): ‘South West Africa 2617Cd / Bethanien Dist. 45 km. W. / Seeheim, 800 m. 19–ii–1974 / ME Irwin, sandy river bank’; 3 ♂ 1 ♀ (PT), 54 km S Khorixas, 20°43'S:14°49'E, 26.iii.1984, Londt & Stuckenberg; 1 ♂ 2 ♀ (PT),

Keetmanshoop Dist., Narubis, nr. Löwen River, 2618Dc, 20-ii-1974, Irwin; 1 ♂ (PT), Keetmanshoop Dist. 17 km / N. Grünau, 2718Bc, 30.i.1974, Irwin; 1 ♂ (PT), Omaruru Dist., 50 km NW Omaruru, 2115Ba, 5.ii.1974, Irwin; 1 ♂ (PT), near Seeheim [26°49'S:17°47'E], 19.ii.1974, Lyneborg (ZMUC). SOUTH AFRICA: *Cape Province*: 1 ♂ 1 ♀ (PT), 26 km N Kenhardt, 2921Aa, 29.i.1974, Irwin.

Etymology: Gr. n. *kerata* – antenna (refers to antennal form).



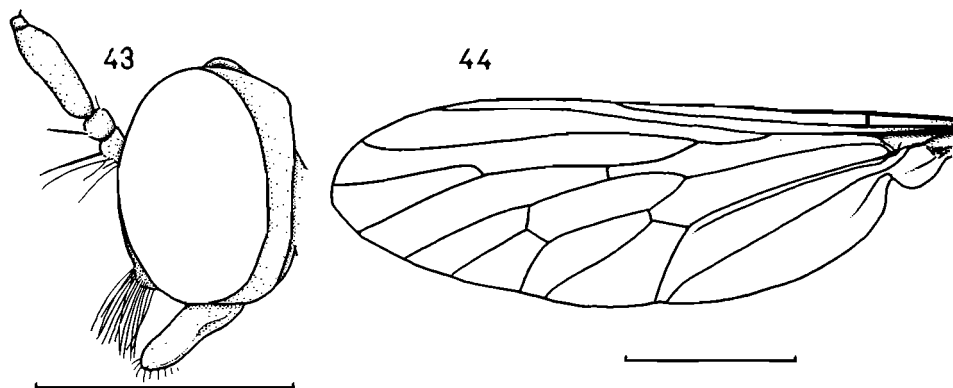
Figs 33–42. *Macroetra* gen. n., ♂ genitalia. 33–36. *M. angola* sp. n. paratype (Capangombo). 33. Lateral. 34. Dorsal. 35. Ventral. 36. Detail of hypandrium, full view. 37–39. *M. cera* sp. n. paratype (45 km W Seeheim). 37. Lateral. 38. Dorsal. 39. Ventral. 40–42. *M. damara* sp. n. paratype ♂ (15 km W Usakos). 40. Lateral. 41. Dorsal. 42. Ventral. Scale lines = 1 mm.

**Microphontes gen. n.**

Type species: *Microphontes whittingtoni* sp. n.

Description: Small, brown-yellow, silver-gold pruinose stenopogonine asilids with the following combination of characters: *Head* (Fig. 43): blackish; clearly wider than high in anterior view. *Antenna*: yellow; scape same length as pedicel, segment 3 *ca.* twice as long as scape and pedicel combined, style terminal, small, cylindrical with spine-like seta. *Mystax* shiny white, confined to lower 1/4 of plane face; palpi 2-segmented. *Thorax*: mesonotum with 3 broad, black, longitudinal bands (central one reaching anterior margin); postmetacoxal area membranous; anepimeral bristle absent; *ca.* 3–4 pairs marginal scutellar macrosetae, disc bare. *Wing* (Fig. 44): *ca.* 3 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup open at wing margin. *Legs*: pulvilli and empodia well developed. *Abdomen*: ♂ terminalia rotated through 90–180°; ♂ epandrial lobes separate (hardly touching basally); hypandrium moderately developed with elongate, triangular mediodistal lobe.

*Etymology*: Gr. *mikros* – small + *phontes* – slayer (refers to the small size of this assassin fly).



Figs 43–44. *Microphontes whittingtoni* gen. & sp. n. paratype ♀ (23 km SE Middelpos). 43. Head. 44. Wing. Scale lines = 1 mm.

**Key to species of *Microphontes* gen. n.**

- 1 Abdomen elongate (clearly longer than wings; most tergites longer than wide in dorsal view); gonocoxite at least 2 times longer than deep in lateral view; ♂ genitalia as in Figs 48–50 ..... **safra** sp. n.  
 Material (NMSA – Type 1106): NAMIBIA: 1 ♂ (HT) 2 ♀ (PT): ‘South West Africa 2516Ac / Maltahöhe Dist. Aandster / Farm, 1000 m. 16–II–1974 / ME Irwin, vegetated dune / and grassland’; 1 ♂ (PT), Maltahöhe Dist., Aandster Farm, 2515Bd, 17.ii.1974, Lyneborg (ZMUC).  
*Etymology*: Ar. *safra* – yellow (refers to overall yellowish coloration).
- Abdomen short to moderate in length (*ca.* as long as wings; most tergites shorter than wide in dorsal view); gonocoxite subspherical and only slightly longer than deep in lateral view ..... 2
- 2 Epandrial lobes shorter or equal in length to hypandrium (in lateral aspect) and lacking downwardly directed tips; ♂ genitalia as in Figs 51–53 ..... **whittingtoni** sp. n.



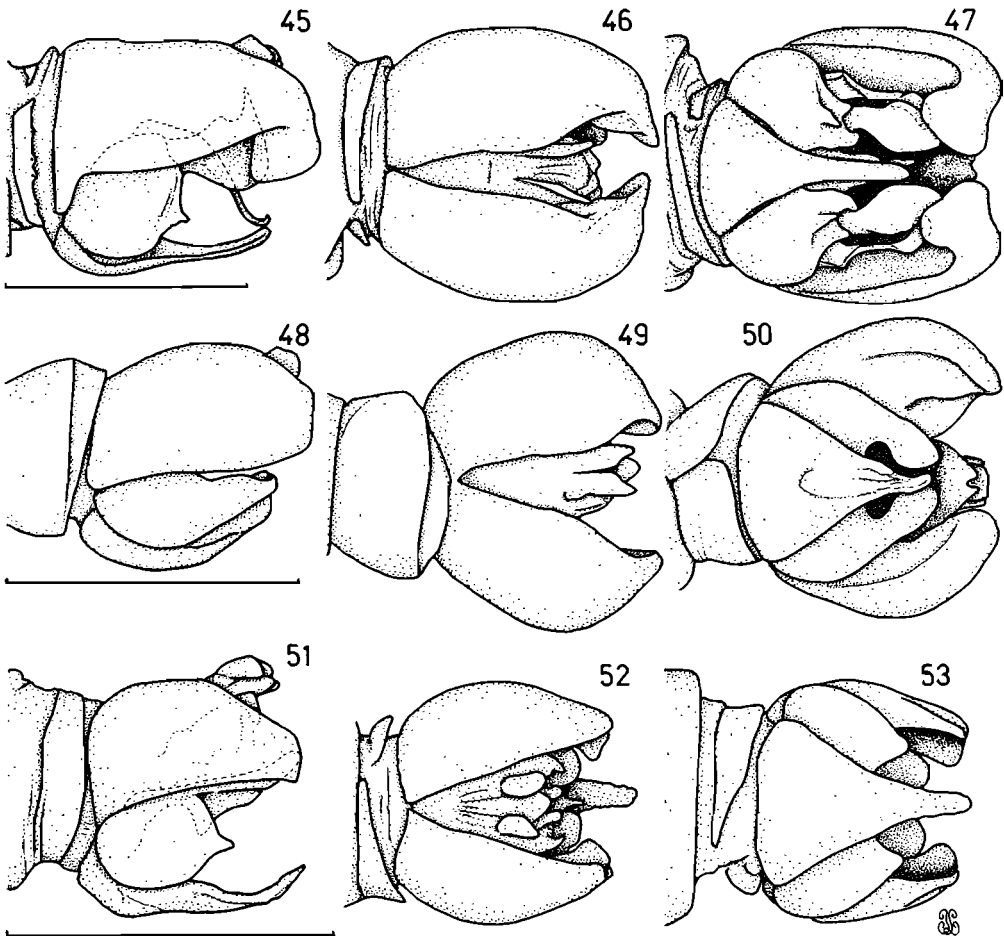
Material (NMSA – Type 1107): SOUTH AFRICA: *Cape Province*: 1 ♂ (HT) 1 ♀ (PT): 'S Africa: Cape #33 / 23 km SE Middelpos / 32°01'S:20°25'E 1200 m / Date: 28.xi.1990 / Whittington & Londt / Banks of Visrivier'; 1 ♂ 1 ♀ (PT), 23 km N Middelpos, 31°44'S:20°14'E, 29.xi.1990, Whittington & Londt; 1 ♂ (PT), 10 km W of Williston, 1060 m, 3120BD, 15.xi.1986, Londt & Quickelberge.

Etymology: Named for Mr Andrew Whittington, who assisted with the collection of specimens.

- Epandrial lobes large and clearly longer than hypandrium (in lateral aspect) and with downwardly directed tips; ♂ genitalia as in Figs 45–47 ..... ***megoura*** sp. n.

Material (NMSA – Type 1108): SOUTH AFRICA: *Cape Province*: 3 ♂ (HT & PT) 5 ♀ (PT): 'Kamieskroon [30°12'S:17°56'E] / Namaqualand / Museum staff / Nov. 1936' (SAMC, NMSA – 1 ♂ PT); 1 ♂ (PT), Kamieskroon, xi.1936, Mus. staff (SAMC).

Etymology: Gr. *mega* = large + *aura* = tail (refers to the large epandrial lobes of this species).

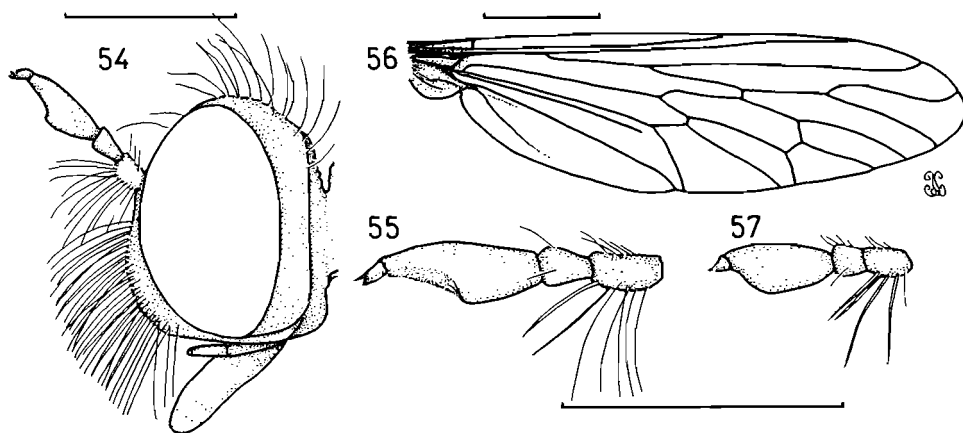


Figs 45–53. *Microphontes* gen. n., ♂ genitalia. 45–47. *M. megoura* sp. n. paratype (Kamieskroon). 45. Lateral. 46. Dorsal. 47. Ventral. 48–50. *M. safra* sp. n. holotype 48. Lateral. 49. Dorsal. 50. Ventral. 51–53. *M. whittingtoni* sp. n. paratype (23 km N Middelpos). 51. Lateral. 52. Dorsal. 53. Ventral. Scale lines = 1 mm.

**Pedomyia** gen. n.

Type species: *Pedomyia epidema* sp. n.

Description: Small to medium sized, dark brown, silver and/or gold pruinose stenopogonine asilids with the following combination of characters. *Head* (Fig. 54): clearly wider than high in anterior view. Antenna: scape a little longer than pedicel, segment 3 a little longer than scape and pedicel combined, widening toward middle (in lateral view) before abruptly tapering to narrow apex, style cylindrical with terminal spine-like seta. Mystax shiny, occupying between  $\frac{1}{2}$  and entire face (slight facial protuberance associated with mystax); palpi 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle absent; numerous scutellar macrosetae (marginal and on disc). Wing (Fig. 56): ca. 3–5 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin, cells  $m_3$  and cup open at wing margin. Legs: pulvilli and empodia well developed. *Abdomen*: somewhat elongate; ♂ terminalia unrotated or rotated up to 90°; ♂ epandrium short (shorter than gonocoxite), separated into two lobes from about  $\frac{1}{3}$ – $\frac{1}{2}$  length from base; hypandrium moderately well developed with mediodistal lobe.



Figs 54–57. *Pedomyia* gen. n., ♂. 54–55. *P. epidema* sp. n. paratype (Strandfontein). 54. Head. 55. Antenna. 56. Wing – holotype. 57. *P. namibia* sp. n. antenna – paratype (28 km W Outjo). Scale lines = 1 mm.

Variation: *P. namibia* sp. n. may be digeneric in that the antennae (Fig. 57) and male genitalia (Figs 73–75) do not entirely conform in shape. The species is, therefore, tentatively assigned to *Pedomyia* pending further analysis.

Etymology: Gr. *pedon* n. ground, earth, soil + *myia* f. –fly (refers to the ground resting behaviour of congeners).

Key to species of *Pedomyia* gen. n.

- 1 Mystax black; katatergal macrosetae black; ♂ genitalia as in Figs 67–69 ..... **melanothrix** sp. n.

Material (NMSA – Type 1109): SOUTH AFRICA: 5 ♂ (HT & PT) 6 ♀ (PT): 'Sth Africa: Cape Prov / Richtersveld 7 km S / Lekkersing 2.ix.1989 / 29°03'00"S:17°06'00"E / J Londt B Stuckenberg / & P Croeser Dry river / flat rocky area 300 m' (BMNH – 1 ♂ 1 ♀ PT); 1 ♂ 5 ♀ (PT), Richtersveld, 1 km N Kuboes, 28°25'S:16°59'E, 1.ix.1989, Londt Stuckenberg & Croeser; 5 ♂ 6 ♀ (PT), Richtersveld, 50 km NE Grootderm, 29°19'S:16°55'E, 3.ix.1989, Londt & Stuckenberg; 2 ♂ 6 ♀ (PT), Richtersveld, 40 km S of Ochta Mine, 2816BD, 2.ix.1983, Londt & Stuckenberg; 1 ♀ (PT), Noordoewe S [2817DA], 14.iv.1981, duwweeltjie [?] (SAMC); 1 ♀ (PT), Droë R. [?], (Namaqualand), 30.ix.1966, SAM (SAMC); 4 ♂ 2 ♀ (PT), Naib [29°21'S:18°20'E] nr Bushmanland Btw Springbok and Pella, x.1939, Mus. Staff (SAMC). NAMIBIA: 1 ♀ (PT), Rosh Pinah [27°58'S:16°46'E], 17.xi.1975, Whitehead (SAMC).

Etymology: Gr. f. *melanos* – black + *thrix* – hair (refers to black setae of the mystax and other parts of the body).

- Mystax white or yellow; katatergal macrosetae white or yellow ..... 2  
 2 Scape and pedicel yellow ..... 3  
 – Scape and pedicel dark red-brown to black ..... 4

- 3 Antennal segment three yellow; ♂ genitalia as in Figs 79–81 .. **xanthocera** sp. n.

Material (NMSA – Type 1110): SOUTH AFRICA: 13 ♂ (HT & PT) 4 ♀ (PT): 'Sth Africa Cape Prov / 20 km NE of Springbok / 2918CA 7.ix.1983 / Londt & Stuckenberg / Rocky hillside & dry / watercourse veget.' (BMNH – 1 ♂ PT); 3 ♂ 1 ♀ (PT), 25 km N Kamieskroon, 2917DD, 5.ix.1983, Stuckenberg & Londt; 1 ♂ (PT), Springbok [29°40'S:17°53'E], 20–24.ix.1970, Potgieter & Snyman; 1 ♀ (PT), 10 km E Garies, 3018CA, 6.ix.1983, Stuckenberg & Londt; 1 ♂ 1 ♀ (PT), 12 mi. NNE Garies, 3018Ac, 9.ix.1972, Irwin; 1 ♂ (PT), 7 mi. NE Garies, 3018Ca, 9.ix.1972, Irwin; 1 ♂ (PT), 13.5 mi. SSW Springbok, nr. Neweputs Farm, 2917Dd, 7.ix.1972, Irwin; 1 ♀ (PT), 2 mi. SW Brandkop, 3119Ac, 12.ix.1972, Irwin; 1 ♀ (PT), 78 km S Springbok, 30°01'S:17°52'E, 31.viii.1989, Stuckenberg Londt & Croeser; 1 ♀ (PT), 10 km E Kamieskroon, 3018AA, 17.x.1977, Miller; 1 ♂ (PT), Knersvlakte, Niewerust [?], ix.1941, Mus. Staff (SAMC); 1 ♂ 1 ♀ (PT), Bowesdorp [30°09'S:17°52'E], ix.1941, Mus. Staff (SAMC).

Etymology: Gr. *xanthos* – yellow + *keras* – horn, antenna (refers to yellow antennae).

- Antennal segment three dark red-brown to black; ♂ genitalia as in Figs 64–66 .... **epidema** sp. n.

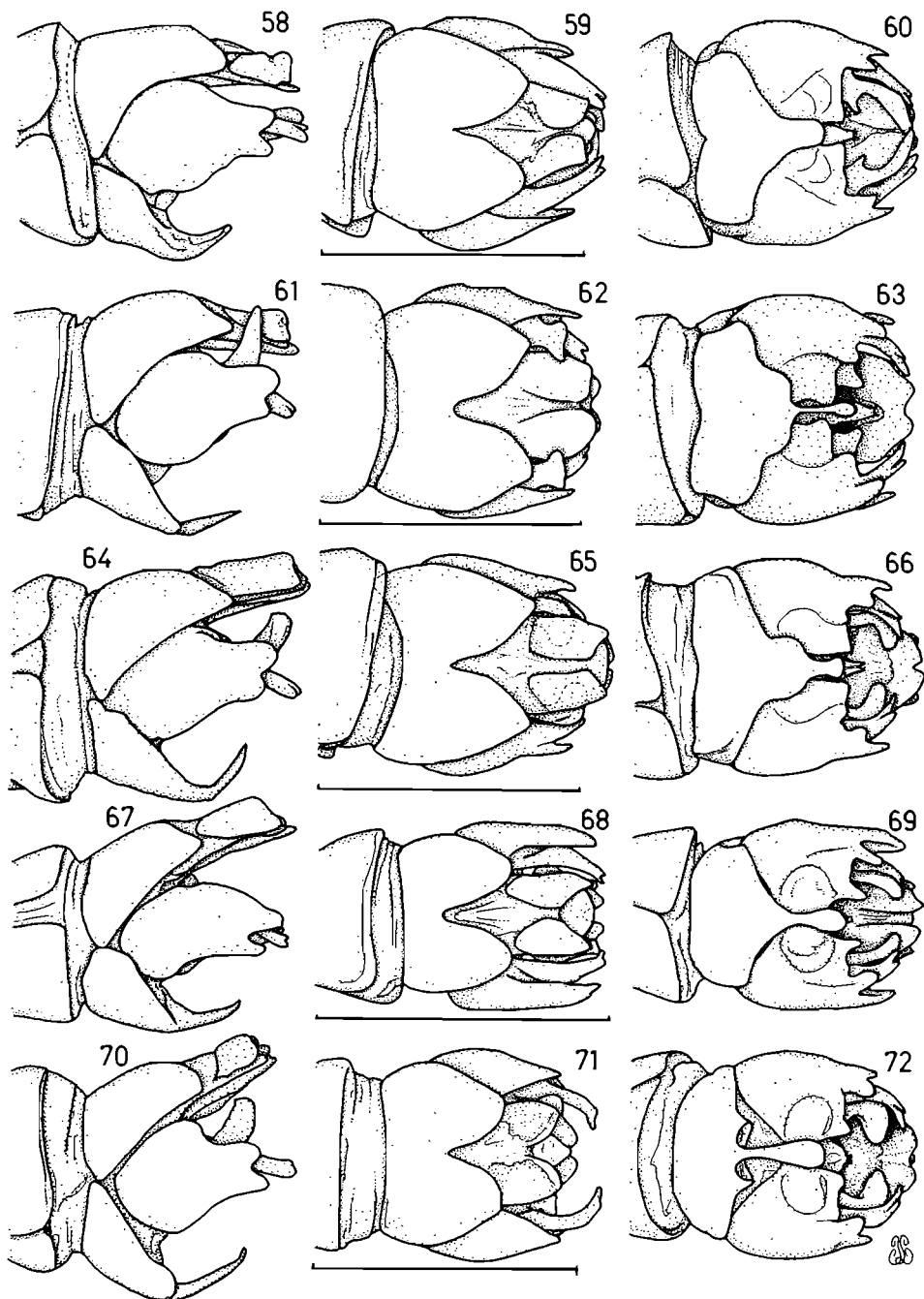
Material (NMSA – Type 1111): SOUTH AFRICA: *Cape Province*: 10 ♂ (HT & PT) 8 ♀ (PT): 'Sth Africa: Cape Prov / Biedou Valley 300 m / 32°06'00"S:19°19'00"E / J Londt B Stuckenberg / & P Croeser 6.ix.1989 / Rocky gentle N slope / Scrub & wild flowers' (BMNH – 1 ♂ 1 ♀ PT); 6 ♂ 4 ♀ (PT), 23 km S Vanrhynsdorp, 31°47'S:18°46'E, 2–4.xi.1991, Londt; 1 ♂ 1 ♀ (PT), 22 km S Vanrhynsdorp, 31°46'S:18°46'E, 2–3.xi.1991, Londt; 2 ♂ 5 ♀ (PT), 24 km S Vanrhynsdorp, 31°46'S:18°48'E, 3.xi.1991, Londt; 8 ♂ (PT), 32 km NE Clanwilliam, Brandewyn R., 3219AA, 2–3.x.1977, Miller; 1 ♂ (PT), 20 km SE Ashton, 3320CC, 25.ix.1979, Londt; 1 ♀ (PT), Op die Berg, 3319AB, 21.xi.1986, Londt; 2 ♂ 2 ♀ (PT), Strandfontein, 3418BA, 10–12.x.1977, Miller; 3 ♂ 4 ♀ (PT), Karoo at junction of Calvinia-Sutherland Rd nr Inverdoorn Ceres, 2–3.x.1959, Stuckenberg; 1 ♀ (PT), Bidouw Valley, 3219AB, 8.ix.1983, Whitehead (SAMC); 3 ♀ (PT), East of Pakhuis Pass, ix.1947, Mus. Exp. (SAMC); 1 ♂ (PT), Clanwilliam, Nardouw [? = Nardouws Mtns 31°55'S:18°45'E], ix.1941, Mus. Staff (SAMC).

Etymology: Gr. *epidemos* – prevalent, common (refers to the species being the most widespread).

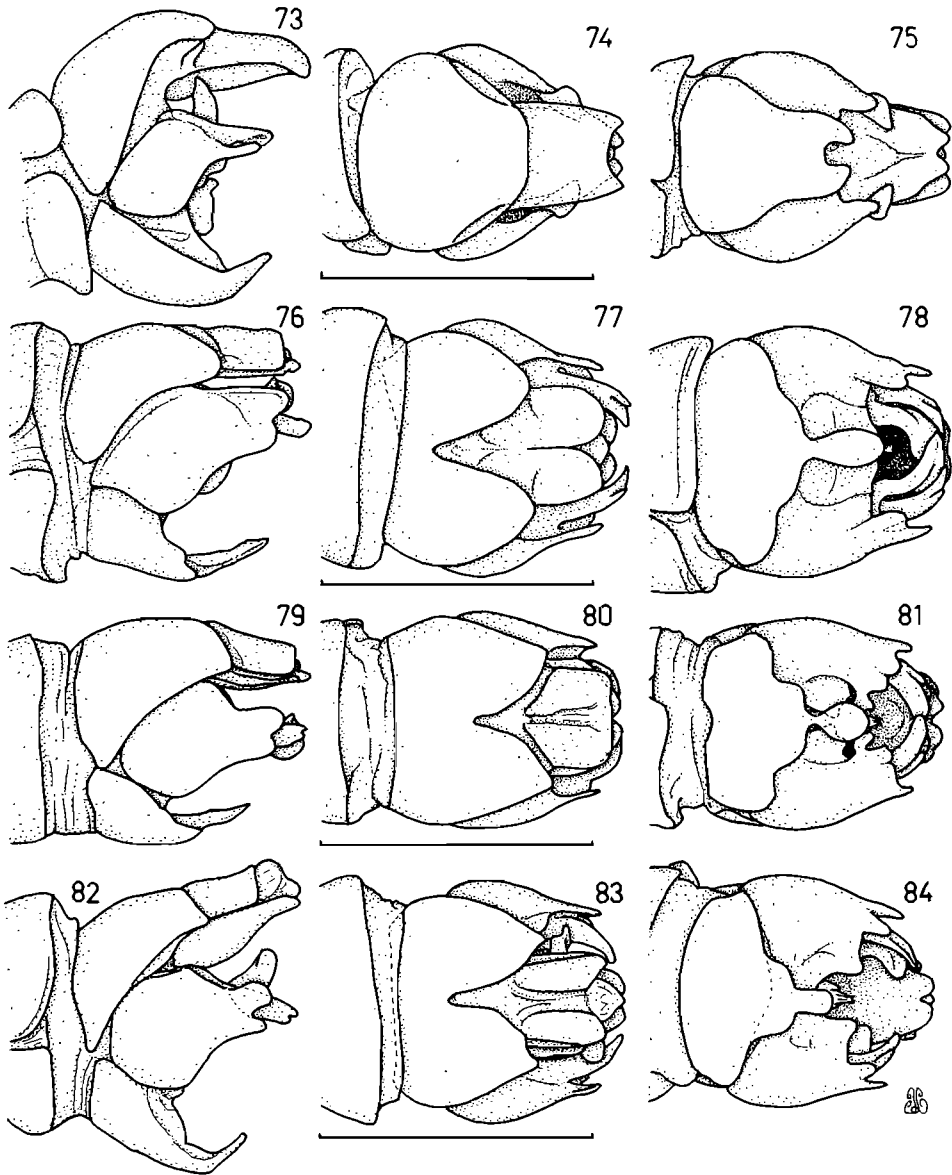
- 4 Metathoracic femur uniformly black ..... 5  
 – Metathoracic femur brown-yellow ventrally, black dorsally (if only proximally) ....6  
 5 Mystax uniformly yellow, occupying a little more than half face; scutellar setae pale yellow; ♂ genitalia as in Figs 73–75 ..... **namibia** sp. n.

Material (NMSA – Type 1112): NAMIBIA: 12 ♂ (HT & PT) 9 ♀ (PT): 'Namibia 24.iii.1984 / 28 km W Outjo. Road 65 / 20 12'S:15 53'E / Londt & Stuckenberg / Mixed bushveld. Grass / & flowers along road'.

Etymology: from Namibia.



Figs 58–72. *Pedomyia* gen. n., ♂ genitalia. 58–60. *P. astroptica* sp. n. paratype (31 km N Sutherland). 58. Lateral. 59. Dorsal. 60. Ventral. 61–63. *P. dryopolis* sp. n. holotype. 61. Lateral. 62. Dorsal. 63. Ventral. 64–66. *P. epidema* sp. n. paratype (Strandfontein). 64. Lateral. 65. Dorsal. 66. Ventral. 67–69. *P. melanothrix* sp. n. paratype (40 km S Ochtá Mine). 67. Lateral. 68. Dorsal. 69. Ventral. 70–72. *P. namaqua* sp. n. holotype. 70. Lateral. 71. Dorsal. 72. Ventral. Scale lines = 1 mm.



Figs 73–84. *Pedomyia* gen. n., ♂ genitalia. 73–75. *P. namibia* sp. n. paratype (28 km W Outjo). 73. Lateral. 74. Dorsal. 75. Ventral. 76–78. *P. simba* sp. n. paratype (15 km E Wellington). 76. Lateral. 77. Dorsal. 78. Ventral. 79–81. *P. xanthocera* sp. n. paratype (20 km NE Springbok). 79. Lateral. 80. Dorsal. 81. Ventral. 82–84. *P. zela* sp. n. paratype (10 km N Tulbagh). 82. Lateral. 83. Dorsal. 84. Ventral. Scale lines = 1 mm.

- Mystax yellow with strong black macrosetae ventrolaterally, occupying  $\frac{3}{4}$  of face; scutellar setae pale brownish; ♂ genitalia as in Figs 70–72 ..... **namaqua** sp. n.  
Material (NMSA – Type 1113): SOUTH AFRICA: *Cape Province*: 1 ♂ (HT): ‘Sth Africa Cape Prov / 12 km W Soutfontein. / 3017DA 4.ix.1981 / J. Londt, L. Schoeman / and B. Stuckenberg / Succulent Karoo’.  
Etymology: from Namaqualand.
- 6 Setae of mystax, vertex and occiput long, shiny yellow; legs entirely orange-yellow except for dorsoproximal parts of femora which are dark red-brown to blackish; thorax dorsally with long shiny yellow setae; ♂ genitalia as in Figs 76–78 ..... **simba** sp. n.  
Material (NMSA – Type 1114): SOUTH AFRICA: *Cape Province*: 2 ♂ (HT & PT): ‘Sth Africa: Cape Prov / 15 km E of Wellington / Bain’s Kloof 3319CA / Londt & Quickelberge / 550 m 22.xi.1986 / Grassy slopes Rocks’; 2 ♂ (PT), Witte River, Wellington, xi.1922, Lawrence (SAMC); 1 ♀ (PT), Klip Vlei, Garies [30°33’S:17°59’E], xi.1931, Museum staff (SAMC).  
Etymology: Bantu. *simba* – lion (refers to the long yellow setae covering much of body).
- Setae of mystax, vertex and occiput white or pale yellow and usually with a few dark red-brown ones; legs yellow-brown with dorsal parts of femora dark red-brown to blackish, tibiae and tarsi also usually brownish; thorax dorsally with short to moderate sized setae which are black and white or pale yellow ..... 7
- 7 Mesonotal setae mostly black, but white ones also occur anteriorly; setae of vertex black and white ..... 8
- Setae of mesonotum and vertex pale yellow; ♂ genitalia as in Figs 61–63 ..... **dryopolis** sp. n.  
Material (NMSA – Type 1115): SOUTH AFRICA: *Cape Province*: 1 ♂ (HT): ‘South Africa / Stellenbosch [33°56’S:18°51’E] / Jonkershoek / 2/12/1981 / G. A. Giliomee’.  
Etymology: Gr. *dryos* – oak + *polis* – city (refers to Stellenbosch, known as the city of oaks).
- 8 Mystax occupies entire face; third antennal segment blackish; metathoracic tarsi and ventrodistal parts of tibiae dark red-brown; ♂ genitalia as in Figs 58–60. .... **astroptica** sp. n.  
Material (NMSA – Type 1116): SOUTH AFRICA: *Cape Province*: 6 ♂ (HT & PT) 5 ♀ (PT): ‘S Africa: Cape #74 / 31 km N of Sutherland / 32°11’S:20°36’E 1600 m / Date: 6.xi.1991 / Coll: J. G. H. Londt / Besemgoedkop and area’.  
Etymology: Gr. *astron* – star + *optikos* – pertaining to sight (refers to the town of Sutherland where a national observatory is situated).
- Mystax occupies  $\frac{3}{4}$  face; third antennal segment brown (variable); metathoracic tarsi and ventrodistal parts of tibiae yellow-brown; ♂ genitalia as in Figs 82–84. . **zela** sp. n.  
Material (NMSA – Type 1117): SOUTH AFRICA: *Cape Province*: 9 ♂ (HT & PT) 6 ♀ (PT): ‘South Africa: Cape / 10 km N Tulbach [= Tulbagh] 3319AA / 27.ix.1991 J. Londt / Lower slopes of mts. / hard soil Woody veget’; 6 ♂ 1 ♀ (PT): E Franschoek Pass, 33°55’S:19°8’E, 8.x.1987, Manning’.  
Etymology: Gr. Thracian word for wine (refers to the winelands of Tulbagh and Franschoek).

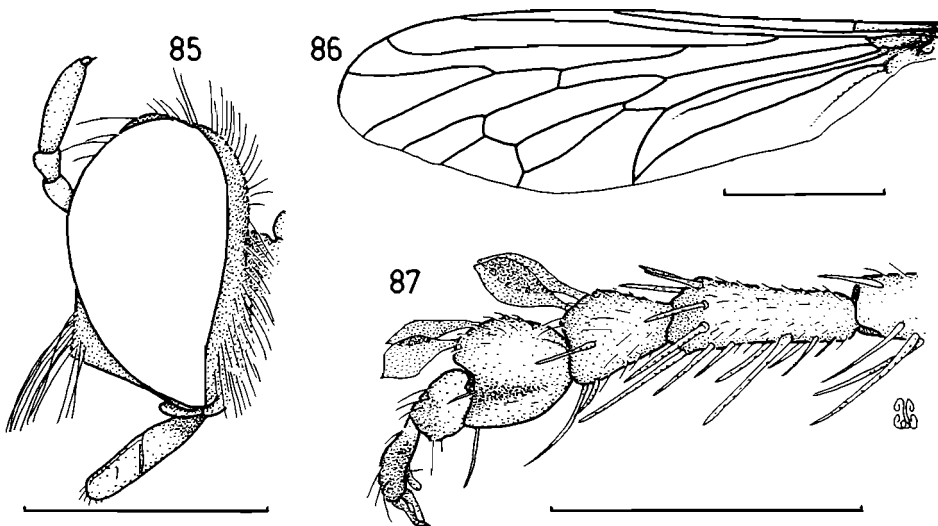
### **Trichoura** gen. n.

Type species: *Trichoura torynopoda* sp. n.

Description: Small, brown-yellow, silver pruinose stenopogonine asilids with the following combination of characters: *Head* (Fig. 85): clearly wider than high in anterior view. Antenna: scape slightly longer than pedicel, segment 3 *ca.* 1.5 times as

long as scape and pedicel combined, style small, conical with terminal spine-like seta. Mystax shiny, white, confined to lower  $\frac{1}{3}$  of plane face (only ventral part somewhat protuberant); palpi small, 2-segmented. *Thorax*: postmetacoxal area membranous; anepimeral bristle absent; 1 pair scutellar macrosetae (a second pair, much smaller than the first, found only in holotype of *krugeri*). Wing (Fig. 86): ca. 3 mm long, transparent, immaculate, uniform microtrichial cover, C extends around entire wing margin (but weakly along hind margin), cells  $m_3$  and cup closed and stalked. Legs: pulvilli and empodia well developed. *Abdomen*: ♂ terminalia unrotated; ♂ epanthrium with long, silvery, prone setae masking shape (except in *proctomeces*); hypandrium small or absent (fused basally with well-developed gonocoxites).

*Etymology*: Gr. f. *trichos* – hair + *oura* – tail: refers to setaceous epanthrium.



Figs 85–87. *Trichoura torynopoda* gen. & sp. n., ♂. 85. Head – paratype (Bloemhof). 86. Wing – paratype (Pretoria). 87. Hind tarsus right – paratype (Pretoria). Scale lines = 1 mm.

#### Key to species of *Trichoura* gen. n.

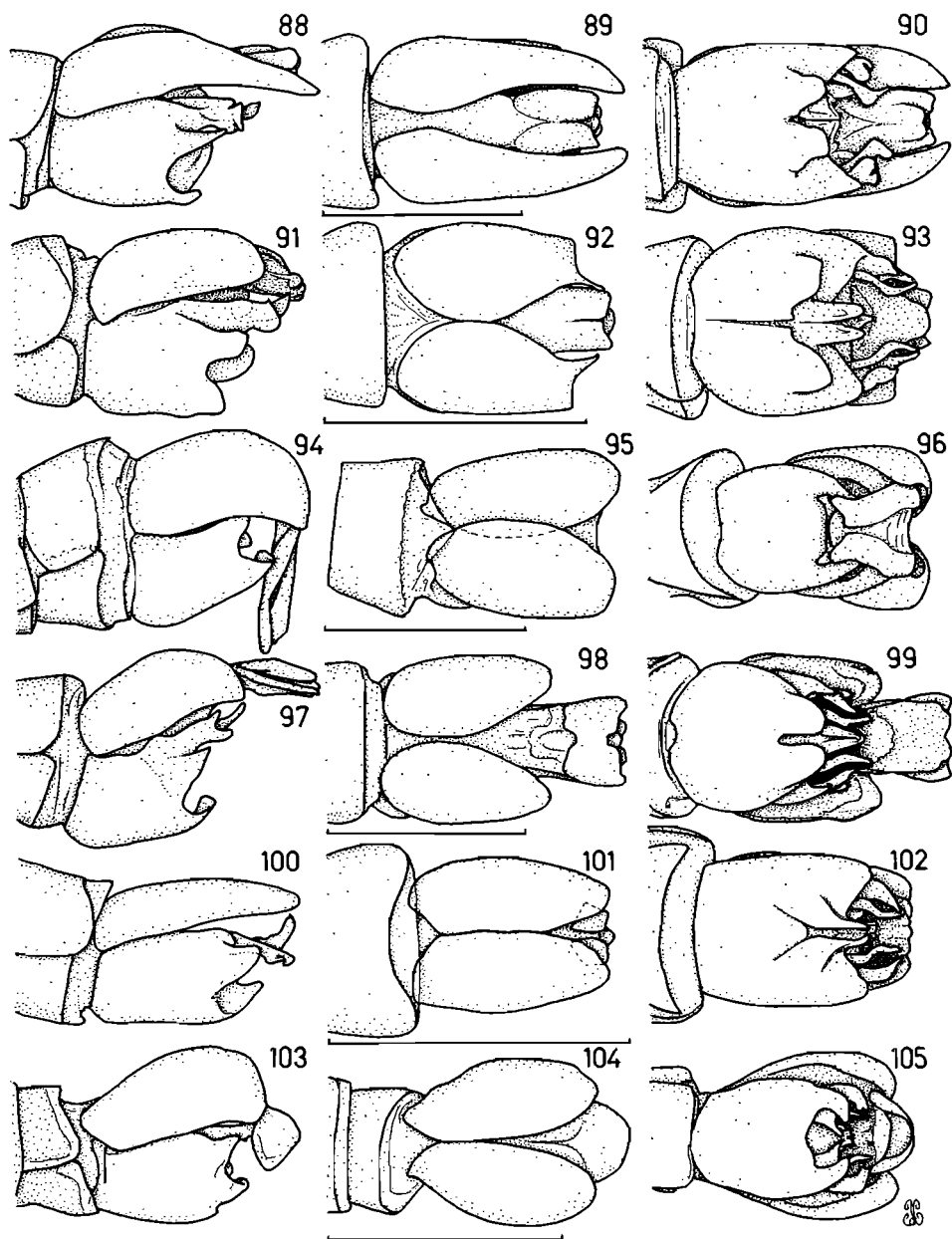
- 1 ♂ metathoracic tarsomeres 2 and 3 laterally compressed, each with pair of dark red-brown leaf-like setae (Fig. 87); ♂ genitalia as in Figs 100–102 .....

#### ***torynopoda* sp. n.**

Material (NMSA – Type 1118): SOUTH AFRICA: *Transvaal*: 3 ♂ (HT & PT) 1 ♀ (PT): 'Bloemhof [27°39'S:25°36'E] / Transvaal / 28.xii.19]62 / Haeselbarth'; 1 ♂ (PT), Pretoria [25°45'S:28°10'E], Waterkloof, xii.1915, Munro.

*Etymology*: Gr. *toryne* – ladle + *podos* – foot (refers to paddle-shaped tarsal setae).

- ♂ metathoracic tarsomeres 2 and 3 of more usual form .....
- 2 Distal part of ♂ epanthrium and proctiger downwardly directed; epanthrium broadly rounded distally; fused gonocoxites with U-shaped distal part in ventral view .....
- 3



Figs 88–105. *Trichoura* gen. n., ♂ genitalia. 88–90. *T. krugeri* sp. n. paratype (Kruger Park). 88. Lateral. 89. Dorsal. 90. Ventral. 91–93. *T. mesochora* sp. n. holotype. 91. Lateral. 92. Dorsal. 93. Ventral. 94–96. *T. proctomeces* sp. n. holotype. 94. Lateral. 95. Dorsal. 96. Ventral. 97–99. *T. tankwa* sp. n. paratype (Tankwa Karoo). 97. Lateral. 98. Dorsal. 99. Ventral. 100–102. *T. torynopoda* sp. n. paratype. 100. Lateral. 101. Dorsal. 102. Ventral. 103–105. *T. tyligma* sp. n. holotype. 103. Lateral. 104. Dorsal. 105. Ventral. Scale lines = 1 mm.



- Distal part of  $\sigma$  epandrium and proctiger straight, not downwardly directed; epandrium pointed or narrowly rounded distally; fused gonocoxites not U-shaped distally in ventral view ..... 5
- 3  $\sigma$  proctiger short, bulbous and truncate in lateral view;  $\sigma$  genitalia as in Figs 103–105 ..... **tyligma** sp. n.  
 Material (NMSA – Type 1119): SOUTH AFRICA: *Cape Province*: 1  $\sigma$  (HT): ‘Sth Africa: Cape Prov / Richtersveld 1 km N / Kuboes 1.ix.1989 200 m / 28°25'30"S:16°59'30"E / J Londt B Stuckenberg / & P Croeser Rocky E slope Euphorbia scrub’.  
 Etymology: Gr. *tyligma* – swelling (refers to bulbous appearance of  $\sigma$  terminalia).
- $\sigma$  proctiger elongate (almost as long as gonocoxite) ..... 4
- 4 Postpronotal lobe yellowish;  $\sigma$  genitalia as in Figs 97–99 ..... **tankwa** sp. n.  
 Material (NMSA – Type 1120): SOUTH AFRICA: *Cape Province*: 3  $\sigma$  (HT & PT) 2  $\varphi$  (PT) 1 ? : ‘Tankwa Karoo / Waterval [?] / C.P. / Mus., Expd., / Nov. 1952’ (SAMC, NMSA – 1  $\sigma$  PT).  
 Etymology: From the Tankwa Karoo.
- Postpronotal lobe blackish;  $\sigma$  genitalia as in Figs 94–96 ..... **proctomeces** sp. n.  
 Material (NMSA – Type 1121): SOUTH AFRICA: *Cape Province*: 1  $\sigma$  (HT): ‘Knersvlakte north / of Vanrhynsdorp [31°37'S:18°44'E] / south-west Cape / 6–9 October 1964 / B & P Stuckenberg’; 1  $\sigma$  1  $\varphi$  (PT), Knersvlakte, x.1939, Mus. Staff (SAMC).  
 Etymology: Gr. *procto* – anus, tail (proctiger) + *mekos* – long (refers to elongate  $\sigma$  proctiger).
- 5  $\sigma$  epandrium longer than proctiger and gonocoxite in lateral view;  $\sigma$  genitalia as in Figs 88–90 ..... **krugeri** sp. n.  
 Material (NMSA – Type 1122): SOUTH AFRICA: *Transvaal*: 2  $\sigma$  (HT & PT): ‘South Africa. Transvaal / Kruger Park 9–xii.1972 / Timbetene Tswiri waterholes / savanna woodland nr Skukuza / B & P Stuckenberg 2431Dc’.  
 Etymology: Named after President Paul Kruger, after whom the Kruger National Park was named.
- $\sigma$  epandrium shorter than proctiger and gonocoxite in lateral view;  $\sigma$  genitalia as in Figs 91–93 ..... **mesochora** sp. n.  
 Material (NMSA – Type 1123): SOUTH AFRICA: *Orange Free State*: 1  $\sigma$  (HT) 1  $\varphi$  (PT): ‘South Africa O.F.S. / 30 km East of Boshof / 2825DA 16.iii.1982 / J. Londt & L. Schoeman / Dry area near koppie’; 5  $\varphi$  (PT), Krugersdrift Dam, Bloemfontein, SE 2926Aa, i.1982, Entomology Dept. (BMSA). *Cape Province*: 1  $\varphi$  (PT), 35 km W Kimberley, 2824CB, 17.iii.1982, Londt & Schoeman.  
 Etymology: Gr. f. *mesotes* – middle, central part + *choros* – place, country (refers to the species inhabiting the central parts of southern Africa).

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